Coming of Age in the Desert:

The NTC at 20

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The authors provide an update on the venerable National Training Center and report how commanders and soldiers are trained to fight in the 21st century.

AFTER THE VIETNAM WAR, the Army was in dreadful condition. Depleted from years of fighting and incapable of fulfilling its role as either a deterrent or a potential winner against the existing Soviet threat, the Army needed dramatic changes. US Army Chief of Staff General Creighton W. Abrams began developing a bold plan for improving and preparing ground forces to counter conventional adversaries.

Abrams' vision touched on every aspect of the Army. The US Continental Army Command (CONARC) would be separated into two new and distinctly different commands: US Army Forces Command (FORSCOM) and US Army Training and Doctrine Command (TRADOC). FORSCOM would maintain current operational readiness, and TRADOC would envision the future battlefield and prepare the Army to fight the next war. To meet future demands, techniques and procedures for acquiring new equipment became focused and geared toward capabilities. Likewise, leader development needed further analysis and both academic and operational changes.

The vision continued to evolve as various senior-level leaders saw the need for change in training techniques. The idea was born of a Fort Hood, Texas, training initiative called Red Thrust, which showed what might happen if a soldier familiar with enemy doctrine assisted opposing force (OPFOR) soldiers in preparing for an aggressive role. What if the Army had a place where large units could fight an established, well-trained, professional enemy—an enemy better trained than any in the world? What if the fight was executed under stressful, demanding, relevant conditions while observed by doctrinal experts who could elicit

lessons from each fight? If unit leaders could learn from mistakes by using video replays, might they not find better ways to apply doctrine and execute missions? This practice would certainly transform training.

During the late 1970s, the chief of armor recommended to the TRADOC commander that Fort Irwin, California, be considered as a maneuver area suitable to the training vision. Based on this recommendation, the National Training Center (NTC) was established at Fort Irwin in 1981. Since then, the unforgiving Mojave Desert has hosted a generation of leaders and units that have experienced high training standards, a dedicated and relentless OPFOR, relevant tactical scenarios and after-action reviews conducted by highly qualified observer/controllers (O/Cs). Throughout 20 years of training Army units, the NTC has been the center of excellence with a distinct warfighting focus: highly realistic, stressful, combined arms training opportunities. The NTC has produced countless tactically competent and confident soldiers capable of applying lessons learned at the NTC.

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The nature of warfare has changed dramatically over the past 20 years, and as national threats have evolved, so has the NTC. It is critical that the NTC continues to evolve while remaining relevant in today's dynamic operational environment.

Training Today's Army

In 1981, the NTC could train only two battalion-size task forces. Today, the NTC has grown to include various combined arms teams and capabilities. All those teams are necessary, given the diversity of rotations and the types of units that train at the NTC. For example, from July 2000 through August 2001, the NTC will have trained:

- Six heavy/light rotations—brigade combat teams (BCTs) that have both mechanized and light infantry battalions, providing unique integration challenges to leaders and soldiers.
- Two fully digitized rotations for the 4th Infantry Division (ID) (Mechanized [M]), including the division capstone exercise (DCX).
- A two-brigade (infantry and aviation) rotation from the 101st Airborne Division (Air Assault).
- The 3d Armored Cavalry Regiment (ACR)—for the first time in its entirety, with one squadron playing simulation in a command post exercise (CPX) role over Death Valley.
- One division cavalry squadron and one light cavalry squadron, each under operational control (OPCON) of a parent BCT.
- Airborne operations, with a battalion from the 82d Airborne Division OPCON to a heavy BCT.
- Two National Guard rotations: 218th Separate Infantry Brigade, South Carolina Army National Guard, which includes Reserve Component (RC) soldiers from 27 different states and the 256th Infantry Brigade (M), Louisiana Army National Guard.
- US Air Force Joint Surveillance Target Attack Radar System (JSTARS), close air support, and combat search and rescue.
- Two Marine recon platoons, reporting to a BCT and a division assault headquarters.
- Two Army Special Forces teams.
- Two RC theater-opening force modules.

During all rotations, the goal of each campaign scenario is to focus

A soldier scans Somali workers for weapons before allowing them onto Sword Base, Mogadishu. US forces and "nonaggressive" clan leaders agreed to allow an equal number of members from each clan to work on Sword Base and other facilities.

US Army

Although focused at the upper end of the conflict spectrum, units training at the NTC find training conditions characteristic of today's operational environment. For example, RSOI is no longer an administrative exercise. From the first day of the RSOI process, deployed US forces encounter terrorism, guerrilla infiltration, media inquiries, host nation officials, NGOs, skeptical civilians, tactical ballistic missile threats and information operations.

training on the wartime mission-essential task list (METL) and potential combat operations. According to the Army Chief of Staff's "Combat Training Center Future Vision," the warfighting focus of units traveling to the NTC will remain at the major theater war (MTW) level.[1]

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RSOI week culminates with stability and support operations (SASO) that include escorting convoys, clearing roads, operating checkpoints, locating mass graves, relocating civilians and delivering relief supplies. This extensive range of conditions and threats continues into the force-on-force phase of the rotation, enhancing units' force-protection knowledge and capabilities. These training conditions reflect the complex global environment.

The OPFOR

Among the most recent and significant changes at the NTC are OPFOR tactics and operations. Once a fairly predictable force modeled after the massed and relentless Soviet formations, today's OPFOR formations have various flexible entities that include infantry forces; small, independent reconnaissance elements; raiding detachments; flank threats from adjacent friendly unit sectors; deception elements; and unpredictable formations that attack based on conditions, not on predetermined timetables. While still highly competitive, the OPFOR is now a freethink-

ing enemy that exploits every weakness in the blue force's (BLUFOR's) plan.

Additionally, the OPFOR now conducts continuous operations that allow the rotational units to collect intelligence and maintain running estimates on subsequent operations. In the past, a BLUFOR fight against a defending enemy would be complete after one battle and would continue against a seemingly new enemy that appeared to the rear of the initial OPFOR position. Today, both initial and subsequent defending forces are present on the battlefield so the BLUFOR can conduct reconnaissance that contributes both to current and future operations. This element of continuous operations also challenges rotational units to develop subsequent plans rapidly to reduce OPFOR preparation time.

US Army

Soldiers role-playing likely refugee activities during a COB event.

Like the media, civilians on the battlefield (COB) are an ever-present condition during contingency operations. . . . COBs train each brigade headquarters and elements of each battalion how to care for and treat civilians. Currently, each rotation incorporates more than 40 COB events that include refugee movements, information peddling to both friendly and OPFOR units, injured civilians seeking medical attention, visits by the UN and elected officials, and altercations among civilians.

The OPFOR's transition reached a new level during the DCX in March-April 2001. During that training rotation, the 4th ID (M) demonstrated its enhanced command, control, communications, computers, intelligence, surveillance and reconnaissance (C^4ISR) capabilities. The OPFOR conducted continuous operations throughout the exercise, mixing conventional, unconventional and asymmetrical capabilities to defeat the BLUFOR. The OPFOR supplemented its conventional forces with tactical unmanned aerial vehicles (UAVs), precision-guided munitions, guerrilla forces, information operations and increased reconnaissance to inflict casualties, destroy high-payoff targets and influence US public opinion. Such training keeps the OPFOR relevant and familiar with threats that US forces will face on future battlefields.

Battlefield Conditions and Asymmetry

While the DCX was a unique rotation, every unit faces battlefield conditions, and enemy asymmetrical capabilities can offset technological superiority and training. Each battlefield condition and asymmetric threat is interwoven into campaign scenarios to replicate the MTW environment that commanders and soldiers may face. For example, in today's complex environment, every commander must consider media influence on military operations and public opinion. Media teams from the fictitious International News Network (INN) operate within the brigade's battlespace throughout the rotation seeking stories.

During RSOI, unit leaders review INN reports that contribute to the unit's intelligence picture and understanding of the area of operations. Additionally, radio, television and print media teams interview commanders and soldiers and conduct on-site reporting.

Because of advanced air and ground weapon platforms and improved situational awareness enabled by ABCS systems, current NTC battlespace is too small to portray adequately the area of operation required by improved heavy forces. [However, newly added acreage] allows scenarios to include more continuous operations to stress intelligence-collection assets and intelligence battlefield preparation.

During combat operations, the INN team pays close attention to battlefield activities and reports stories involving civilians, NGO representatives and fratricide. Unit leaders quickly realize the benefit of command media messages and proper procedures for escorting and briefing journalists because the stories are seen by rotational units, enemy forces, terrorists and local civilians.

Recently, the media's battlefield role has expanded at the NTC. The NTC invited several major universities to send journalism students to act as embedded media with rotational units. While still in its early phases, this program could provide excellent training, telling the Army story to a larger audience and preparing leaders for future battlefields.

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Civilian activities have penalty or reward mechanisms triggered by the training unit's behavior. If unit representatives treat COBs with dignity and respect, the unit will receive useful information concerning guerrilla activities, blacklisted individuals or upcoming military operations. If not treated well, COBs will plant misinformation or withhold important information. In recent rotations, COBs who did not find relief from perceived mistreatment disrupted unit rehearsals and combat operations; those treated well sold or gave useful information to unit leaders.

The OPFOR also carries out guerrilla operations. The People's Pahrumphian Guerrillas (PPG) operate a 40-person cell in a brigade's battlespace throughout the rotation, attempting to destroy high-payoff targets such as attack helicopters, radars, and command and control nodes, while preserving their ability to fight. If the training unit adequately protects these critical assets, the PPG attacks less-well-protected targets such as logistics convoys. The PPG also attempts to persuade mistreated COBs to join the terrorist cell.

Military Operations on Urbanized Terrain

Closely related to the civilian operational environment is the military operations on urbanized terrain (MOUT) environment. Each training rotation includes four MOUT events. Three NTC MOUT facilities allow units to plan, prepare and execute company-size operations. Two sites support force-on-force training that includes security procedures, room clearing, reacting to snipers, reacting to belligerent civilians and negotiating with local leaders. Training at these sites normally occurs as part of a BCT's SASO during RSOI week. Each rotation also includes a fixed-site decontamination event for chemical companies. The third MOUT site of six wooden buildings supports force-on-force and live-fire training for light infantry companies and military police platoons. The live-fire exercise at Lima Ville is normally a raid to destroy a guerrilla element.

The NTC plans to expand MOUT training within a few years. While the installation master plan addresses significant infrastructure additions

Reporters from The Associated Press, *Time*, CNN, the *Baltimore Sun*, National Public Radio and other media outlets being briefed by an OPFOR member at the NTC.

DOD

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to MOUT facilities before Fiscal Year (FY) 2004, scenario design has recently employed the combat support engineer units from rotational brigades and RC vertical and horizontal engineers to improve existing MOUT sites. These activities expand host nation coordination requirements and security concerns during RSOI week, further stressing BCT planning and execution.

Expanding the Training Environment

A significant milestone in the NTC's evolution occurred in August 2000 with a simulation "wraparound" during the 1st Brigade, 4th ID (M) rotation. With help from the National Simulation Center (NSC), Fort Leavenworth, Kansas, the NTC replicated friendly and enemy forces operating in the division's area of interest, which extended beyond the NTC's maneuver space. Before this, the NTC's notional division headquarters had generated flank awareness for the player brigade through operations and intelligence reports. The August 2000 rotation marked a distinct expansion of the training environment as the 4th ID's tactical command post (DTAC) assumed the role of higher headquarters, feeding reports to 1st Brigade through a suite of Army Battle Command System (ABCS) digital communications links.

The rotation also marked the first use of simulated tactical UAVs and JSTARS. NTC and NSC technicians connected the Fort Irwin instrumentation tracking system to the NSC's Digital Battle Staff Trainer (DBST), which displayed the training unit's UAV and JSTARS pictures of actual friendly and enemy vehicles in the maneuver area and simulated vehicles in the contiguous battlespace. The division could see and interdict enemy forces as part of a true deep fight, and 1st Brigade gained accurate situational awareness before committing to the close battle.

The success of the simulation wraparound paved the way for using simulations during future rotations that would require a larger battlespace for the digitized division and an ACR. In April 2001, the simulation

allowed the entire 3d ACR to deploy and train at the NTC with two ground squadrons, the air squadron in the live area and one ground squadron in simulation. The simulated squadron's commander and his staff deployed and fought from their command post, issuing orders and instructions to their subordinate units via Janus simulation. The regimental commander and staff gained a greater appreciation for the regiment's aviation and logistic requirements.

Enlarging the training area is not limited to the virtual world. A 15-year effort to make the NTC's maneuver area more environmentally friendly has added acreage to the eastern and southwestern portions of the reservation. Because of advanced air and ground weapon platforms and improved situational awareness enabled by ABCS systems, current NTC battlespace is too small to portray adequately the area of operation required by improved heavy forces. The additional maneuver space allows scenarios to include more continuous operations to stress intelligence-collection assets and intelligence battlefield preparation.

Scheduled to support six of the 10 training rotations in FY 01, JSTARS allows training units to incorporate information from the common ground station located in brigade tactical operations centers into battlefield estimates and decisions. Through simulation, JSTARS will also support two additional training rotations, giving more brigade commanders and their staffs valuable training with the system.

Joint Training

The diversity of NTC training operations offers unique opportunities to conduct joint training. Joint training during FY 01 has included US Air Force (USAF) tactical fighter wings; JSTARS; USAF battlefield surveillance programs, such as Compass Call; the Airborne Battlefield Command and Control Center (ABCCC); USAF combat search and rescue; and US Marine Corps (USMC) force reconnaissance elements.

One significant area of service integration is close air support. The NTC's Detachment 2, USAF Air Ground Operations School (Team Raven), observes approximately 2,000 fighter sorties annually and coordinates training for tactical air control parties associated with Army units training at the NTC.[2] Since 1981, rotational units have operated with their go-to-war USAF air liaison officers and tactical air controllers. Today, each force-on-force and live-fire battle at the NTC incorporates close air support, which challenges the coordination efforts of leaders and staffs.

The JSTARS platform is another significant USAF contribution at NTC. Scheduled to support six of the 10 training rotations in FY 01, JSTARS allows training units to incorporate information from the common ground station (CGS) located in brigade tactical operations centers into battlefield estimates and decisions. Through simulation, JSTARS will also support two additional training rotations, giving more brigade commanders and their staffs valuable training with the system.

Recently, the training partnership between the NTC and the China Lake Naval Air Warfare Center has solidified. Adjacent to the NTC's western boundary, this expansive fighter aircraft range allows Army aviation units to conduct deep attacks against OPFOR targets 70 to 90 kilometers beyond the forward line of troops. Two rotations in FY 01 included these deep attacks in their scenarios, resulting in critical lessons for Army aviation.

The USMC reconnaissance elements will participate in NTC rotations within the year, sharpening warfighting skills and gaining experience working with Army units. Platoons from the 1st Force Reconnaissance Company; I Marine Expeditionary Force; and 3d Force Reconnaissance Company, 4th Marine Division will train in June and August

2001. During combat operations, they will report to their company headquarters that is located with the division headquarters and staffed by NTC personnel.

Operations Group: Paralleling the Changes

Like the training center itself, the NTC Operations Group is evolving with the Army's training doctrine and the global environment. With more than 680 military and civilian members, the operations group has modified its organization, training and procedures to facilitate each training unit's operational missions. O/C teams have added trainers for COB, operational law and the media. Additions to the technical support functions include a simulation control cell that ensures seamless interaction between virtual and live battlefields. Contractors work hand in hand with military counterparts as civilian role players and technical experts.

Perhaps the most valuable tool for training units is the feedback and observations O/Cs provide during after-action reviews. O/Cs provide comments supported by cause-and-effect links that allow leaders and units to understand what happened and discuss ways to improve. O/Cs also provide feedback on critical combat skills, SASO missions, COB and the media. In preparation for the 4th ID's DCX, O/Cs received detailed training in unit-specific ABCS and Force XXI Battle Command Brigade and Below systems. These digital systems enabled O/Cs to provide meaningful insight and feedback to training units equipped with the latest digital technologies.

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Toward the Future

The first 20 years of training at the NTC reflects the evolution of Army training, doctrine, units and leaders, and it is already planning for the next 20. The NTC's founding fathers envisioned a center of excellence to produce flexible and decisive leaders through rigorous training, a relevant battlefield, simulated combat stresses and a tough OPFOR. They had it right, and so do we. The NTC is dedicated to preserving Abrams' vision by staying relevant to our Army and the nation's threats. ***MR***

NOTES

1. General Eric K. Shinseki, *Army Chief of Staff Combat Training Center Future Vision* (Washington, DC: Office of the Chief of Staff, US Army, March 2000), 4.
2. Web Page, Detachment 2, USAF Air Ground Operations School, 26 December 2000, <www. irwin.army.ravens>.

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